Application No.: 10/528,892

Amendment Dated: September 13, 2007 Reply to Office Action Dated: June 18, 2007

## **REMARKS**

Claim 1 has been amended to correct a typographical error. The plasmid "pLAFRI" has been corrected to recite "pLAFRI." Support for this amendment is found in the specification at, for example, page 3, lines 1-6.

It is submitted that no new matter has been introduced by the foregoing amendment. Approval and entry of the amendment is respectfully solicited.

## §112, First Paragraph Rejection:

## **Enablement**

Claims 1, 3, 6, and 8 have been rejected solely under 35 U.S.C. §112, first paragraph, for lack of enablement. (Paper No. 20070607 at 2). In making the rejection, the Examiner asserted that "the processes used to make *Sinorhizobium meliloti* IFO 14782/pVK601 and *Sinorhizobium meliloti* PY-C341K1 using plasmids pVK100, pRK290, pLAFR1, and/or RSF1010 do not appear to be repeatable." (*Id.* at 3). The Examiner further asserted that "[a]n enabling deposit of *Sinorhizobium meliloti* IFO 14782/pVK601 and *Sinorhizobium meliloti* PY-C341K1 and plasmids pVK100, pRK290, and pLAFR1 may overcome the rejection." (*Id.*).

Initially, we note that plasmids pVK100<sup>1</sup>, pRK290, pLAFR1, and RSF1010 are well known in the art. Plasmids pVK100, pRK290, pLAFR1, and RSF1010 are commercially available and can each be purchased from Deutsche Sammlung von Mikroorganismen und Zeilkulturen GmbH (DSMZ) in Gottingen, Germany. Attached as Exhibit 1 for the Examiner's convenience is a printout from the Internet demonstrating

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<sup>&</sup>lt;sup>1</sup> We note that an internet printout demonstrating that plasmid pVK100 is readily available was already submitted in our previous Response filed March 15, 2007; however, for the Examiner's convenience, another copy is enclosed as Exhibit 1.

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that plasmids pVK100, pRK290, pLAFR1, and RSF1010 are well known and readily

available.

With respect to Sinorhizobium meliloti IFO 14782/pVK601

Sinorhizobium meliloti PY-C341K1, we note that these materials are being deposited in

accordance with the Budapest Treaty. The following statements regarding these

respective deposits are provided upon information and belief:

During the pendency of this application, access to the deposits will be

afforded to the Commissioner upon request.

All restrictions imposed by the depositor on the availability to the public of

the above-referenced deposited material will be irrevocably removed upon the granting

of a patent.

The deposits will be maintained in a public repository for a period of 30

years or 5 years after the last request or for the effective life of the patent, whichever is

longer.

The deposits will be replaced if they should ever become inviable.

Although not necessary to comply with §112, first paragraph, it is

respectfully submitted that the application fully complies with the deposit requirements

as set forth in 37 CFR § 1.808. Therefore, the rejection has been rendered moot and

should be withdrawn.

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Accordingly, for the reasons set forth above, entry of the amendment, withdrawal of the rejection, and allowance of the claims are respectfully requested. If the Examiner has any questions regarding this paper, please contact the undersigned.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on September 13, 2007.

Charles M. Avigliano, Reg. No. 52,578

Respectfully submitted,

Charles M. Avigliano

Registration No. 52,578 BRYAN CAVE LLP

1290 Avenue of the Americas

33<sup>rd</sup> Floor

New York, NY 10104-3300

Phone: (212) 541-2000 Fax: (212) 541-4630

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Search	

Advanced Search

Plasmid pVK100

»Head of Department

» Publications > Catalogue »Staff

pVK100 7141 DSM No. Name

ATCC 37156, K12 HB101 Other Collection No.

History

<- ATCC <- E. Nester, Washington

Mol. Weight

\*Conditions of Delivery » Technical Information

Ordering Procedure

> Prices

23.00 kb

Km<sup>r</sup>, Tc<sup>r</sup>

Marker

Remarks

A cosmid broad host range cloning vector. Mobilization by the helper plasmid pRK2013. Construction: pRK290 and pHK17 cos site. Cloning sites:

EcoRI, Sall, HindIII, XhoI.

Escherichia coli K12 HB101 Distributed in

381, 37°C

Medium

» Bacterial Nomenclature

»Safety Instructions

» Deposit » Special Services 6295

Reference

Price

EURO 38 (non-profit making institutions), EURO 54 (other institutions): Normal price.

Genetically engineered microorganism(C)

Restriction

X Back

Conditions Imprint

```
Return to this vector's summary.
```

```
ID
     PVK100
                 preliminary; circular DNA; SYN; 23000 BP.
XX
AC
     ATCC37156;
XX
DT
     01-JUL-1993 (Rel. 7, Created)
DT
     01-JUL-1995 (Rel. 12, Last updated, Version 1)
XX
     Broad host range/E.coli cosmid vector pVK100 - incomplete.
DE
XX
KW
     cloning vector.
XX
OS
     Cloning vector
OC
     Artificial sequences: Cloning vehicles.
XX
RN
     [1]
RC
     pVK100 from pRK290 & pHK17
RC
     pVK101 from pVK100
RC.
     pVK102 from pVK100
     pVK200 series from pVK102 & pTiA6
RC.
RC
     pVK261 from pVK102 & pTiA6
RA
     Knauf V.C., Nester E.W.;
RT
     "Wide host range cloning vectors: a cosmid clone bank of an
     Agrobacterium Ti plasmid";
RT
RL
     Plasmid 8:45-54(1982).
XX
RN
RC
     pHK17 from pRK2501 & pHC79
RC
     pHK111, pHK121, pHK120, pHK210 from pHK17 & pTiA6
RC.
     pTiA6::Tn5 from pTiA6 & Tn5
3A
     Klee H., Gordon M.P., Nester E.W.;
     "Complementation analysis of Agrobacterium tumefaciens Ti plasmid
₹T
۲T
     mutations affecting oncogenicity";
₹L
     J. Bacteriol. 150:327-331(1982).
(X
ЗN
     [3]
₹C
     pTiB6-806 from Agrobacterium Ti octopine plasmid
₹C
     pTiA6 from Agrobacterium Ti octopine plasmid
₹C
     pTiACH5 from Agrobacterium Ti octopine plasmid
$Ć
    pTiT37 from Agrobacterium Ti nopaline plasmid
·IC
    pTiC58 from Agrobacterium Ti nopaline plasmid
ŁA.
     Nester E.W., Kosuge T.;
¦T
     "Plasmids specifying plant hyperplasias";
     Annu. Rev. Microbiol. 35:531-565(1981).
:L
X
N.
     [4]
iC
     from pVK102 & OpMNPV
     Chen D.D., Nesson M.H., Rohrmann G.F., Beaudreau G.S.;
Α
     "The genome of the multicapsid baculovirus of Orgyia pseudosugata:
T.
T.
     restriction map and analysis of two sets of GC-rich repeated
.T
    sequences";
L
     J. Gen. Virol. 69:1375-1381(1988).
X
C
    A cosmid, broad host range cloning vector. (ATCC staff)
С
    Mobilization by the helper plasmid pRK2013 (ATCC 37159).
С
    Medium is 1273 LB plus tetracycline.
C
    NM (pVK100)
С
    CM (no)
С
    NA (ds-DNA)
\mathbb{C}
    TP (circular)
    ST ()
```

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CC.
     TY (cosmid)
CC
     SP (ATCC)
     HO (E.coli HB101) (broad host range) (E.coli)
CC
CC
     CP ()
CC
     FN (cloning)
CC
     SE ()
CC
     PA ()
CC
     BR ()
CC
     OF ()
CC
     OR ()
{X
H
     Key
                      Location/Qualifiers
?H
T?
     misc feature
                      0..0
FT
                      /note="1. RK2, oriT/tet gene
?T
                      -> pRK248 10000bp
T
                      1. pRK248 10000bp
^{\circ}\mathbf{T}
                      2. E. coli 1100bp, kan gene
ŀΤ
                      -> pRK2501 11100bp
т
                      1. pRK2501 BglII 11100bp
Т
                      2. pHC79 BglII-BglII 1719bp 2111..3830, lambda cos
Т
                      -> pHK17 12800bp
'n
                      1. RK2
т
                      -> pRK290 20000bp
T'
                      1. pRK290 Sall-EcoRI, trfA/trfB genes
T'
                      2. pHK17 SalI-EcoRI, oriV
Т
                      -> pVK100 23000bp"
т
    misc_binding
                      0..0
Т
                      /note="SIT unique EcoRI-SalI-HindIII-XhoI"
T
    rep_origin
T
                      /note="ORI E. coli RK2"
T
    CDS
                      0..0
                      /note="ANT E. coli kanamycin resistance gene (kan)"
T
T
    CDS
                      0..0
T
                      /note="ANT E. coli tetracycline resistance gene (tet)"
Х
Q
    Sequence 1 BP; 0 A; 0 C; 0 G; 0 T; 1 other;
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Search Goodward Search Goodward Search Goodward Search Goodward Search Staff Staff Shrices Shrices	Identification  Plasmid pRK290  Name DSM No. Other Collection No. History	Parent and Safe Deposition of the part of	Microorganisms Plant viruses plant Cell Lines Hurran and Animal Cell Lines
»Conditions of Delivery	Mol. Weight Marker	20 kb <sub>T-</sub> r	
» lechnical information » Deposit	Remarks	1C Broad host range cloning vector mobilizable by pRK2013; constructed from RK2; unique restriction sites: EcoRI, Bg/II.	e by pRK2013; constructed
» Special Services	Distributed in	Escherichia coli K12 HB101	
»Safety Instructions	Medium	3 <u>81</u> , 37°C	

Back

EURO 38 (non-profit making institutions), EURO 54 (other institutions): Normal price.

3440

Reference Medium

» Bacterial Nomendature

Price

Genetically engineered microorganism(C)

Restriction

<u>Imprint</u> Conditions

9/11/2007



ATCC 37167, K12 MM294 pLAFR1 6305 Other Collection No. Plasmid pLAFR1 Mol. Weight DSM No. History Marker Name 00 Conditions of Delivery »Technical Information "Head of Department »Ordering Procedure Advanced Search »Staff »Catalogue » Publications » Prices Search

<- ATCC <- F.M. Ausubel

21.6 kb

Remarks

Contains cos site and a relaxation complex site; a broad host range cosmid

»Deposit

vector.

Distributed in

» Bacterial Nomenclature » Special Services Safety Instructions

Escherichia coli K12 MM294

EURO 38 (non-profit making institutions), EURO 54 (other institutions): 381, 37°C Medium Price

Genetically engineered microorganism(C)

Restriction

Normal price.

**B**ack

Conditions Imprint

9/11/2007



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Search

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K12 C600, NCIMB 11947 RSF1010 5401 Other Collection No. DSM No.

<- NCIB <- K.N. Timmis History

8.9 kb Mol. Weight

»Conditions of Delivery

»Ordering Procedure

» Catalogue

> Prices

» Technical Information

Sm<sup>r</sup>, Su<sup>r</sup> Marker

Broad host range, high copy number plasmid used for cloning in *Pseudomonas*; unique restriction site: *EcoRI*. Remarks

Escherichia coli K12 C600 Distributed in

381, 37°C

Medium

>Special Services

» Deposit

Price

» Bacterial Nomenclature

»Safety Instructions

EURO 38 (non-profit making institutions), EURO 54 (other institutions): Normal price.

Genetically engineered microorganism(C) Restriction

**B**ack

Conditions Imprint